

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/393,616	OLAFFSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	George Eng	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/2004.
2. ☒ The allowed claim(s) is/are 32,33,41,42,44,45,55,56,70,73-84,89 and 90.
3. ☒ The drawings filed on 10 September 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>4/20/2001</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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**GEORGE ENG**  
**PRIMARY EXAMINER**

**EXAMINER'S AMENDMENT AND STATEMENT OF REASONS FOR ALLOWANCE**

*Examiner's Amendment*

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Farshad Farjami (Reg. No. 41,014) on 1/28/2005.

2. The application has been amended as follows:

Cancel claims 85-88.

32. (Currently Amended) A first modem for communication with a second modem over a communication channel, said first modem being in communication with a handset, said first modem comprising:

an off-hook detector capable of detecting said handset going off-hook, while said first modem is in communication with said second modem, and further being capable of generating an attention signal in response thereto; and

a transmitter capable of transmitting a hold request to said second modem in response to said attention signal;

wherein said handset is placed off-hook by a user for dialing an outgoing call, and wherein said communication between said modems over said communication channel ceases for

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a period of time after transmitting said hold request, and wherein said first modem keeps an upper layer protocol alive during said period of time by manufacturing data and presenting said data to an upper layer to maintain an appearance of receiving said data from said second modem.

44. (Currently Amended) A communication method for use between a first modem and a second modem in communication over a communication channel, said first modem being in communication with a handset, said communication method comprising the steps of:

detecting said handset going off-hook;

transmitting a hold request to said second modem in response to said handset going off-hook;

ceasing said communication with said second modem over said communication channel by said first modem for a period of time;

causing a dial tone to be generated for dialing an outgoing call using said handset; and

keeping an upper layer protocol alive during said period of time by manufacturing data and presenting said data to an upper layer to maintain an appearance of receiving said data from said second modem.

73. (Currently Amended) A first modem capable of communicating with a second modem over a communication channel, a portion of said communication channel existing over a telephone line between said first modem a central office, said first modem comprising:

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a receiver capable of receiving a relinquishment request, while said telephone line is in use by said first modem for communication with said second modem, to relinquish said use of said telephone line;

and a transmitter capable of transmitting a hold request to said second modem to place said communication between said modems on hold;

wherein said communication between said modems is placed on hold and said use of said telephone line is relinquished, and wherein said first modem causes a dial tone to be generated over said telephone line after said communication between said modems is placed on hold, and wherein said first modem keeps an upper layer protocol alive while said modems are on hold by manufacturing data and presenting said data to an upper layer to maintain an appearance of receiving said data from said second modem.

79. (Currently Amended) A method of sharing a telephone line for use by a first modem, said first modem being in communicating with a second modem over a communication channel, a portion of said communication channel existing over said telephone line between said first modem and a central office, said method comprising:

receiving a relinquishment request, while said telephone line is in use by said first modem for communication with said second modem, to relinquish said use of said telephone line;

transmitting a hold request to said second modem to place said communication between said modems on hold;

placing said communication between said modems on hold;

keeping an upper layer protocol alive by manufacturing data and presenting said data to an upper layer to maintain an appearance of receiving said data from said second modem;  
relinquishing said use of said telephone line; and  
causing a dial tone to be generated over said telephone line.

***Allowable Subject Matter***

3. Claims 32, 33, 41, 42, 44, 45, 55, 56, 70, 73-84, 89 and 90 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Applicant's invention is drawn to a communication having a local modem and a remote modem, which each of the local and remote modem capable of maintaining an appearance of a connection to the upper layer protocol while the two modems are on hold (i.e., a modem capable of transmitting keep alive packet streams, including data bits or control signal or both, to the higher TCP/IP protocol layer after the modem signal is interrupted in order to prevent the session from terminating).

Applicant's independent claims 32 and 73 each recite, *inter alia*, a first modem for communication with a second modem over a communication channel with a structure as defined in the specification (pages 11-21) including said communication between said modems over said communication channel ceases for a period of time after transmitting said hold request and said first modem keeps an upper layer protocol alive while said modems are on hold by manufacturing data and presenting said data to an upper layer to maintain an appearance of

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receiving said data from said second modem. Applicant's claims 32 and 73 comprise a particular combination of elements, which is neither taught nor suggested by the prior art.

Applicant's independent method claims 44 and 79 each recite, *inter alia*, placing said communication between said modems on hold, and keeping an upper layer protocol alive during said period of time by manufacturing data and presenting said data to an upper layer to maintain an appearance of receiving said data from said second modem. These steps, in combination of the remaining steps, are neither taught nor suggested by the prior art.

Accordingly, Applicant's claims are allowed for these reasons and for the reasons recited by Applicants in Amendments filed 8/24/2001, 1/22/2002, 5/10/2002, 11/6/2002, 3/24/2003, 10/6/2003 and 10/12/2004.

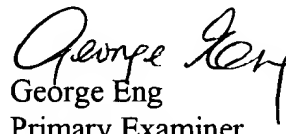
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tue-Fri 7:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
George Eng  
Primary Examiner  
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